



# environmental affairs

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

## RISK ASSESSMENT IN TERMS OF REGULATION 8 OF THE WASTE EXCLUSION REGULATIONS

<b>APPLICANT</b>	BADER SA (Pty) Ltd
<b>WASTE STREAM OR PORTION OF A WASTE STREAM TO BE EXCLUDED FROM THE DEFINITION OF WASTE</b>	Leather shavings and effluent sludge waste
<b>BENEFICIAL USE/S</b>	<p>An agreement has been entered into between BADER SA (Pty) Ltd and Cemblocks (Pty) Ltd to re-use leather shavings and effluent sludge in cement brick manufacturing.</p> <p>Leather shavings and effluent sludge will be used as raw material in cement brick manufacturing.</p> <p>The re-use of leather shavings and effluent sludge will have a beneficial impact by reducing the stress placed on landfills.</p> <p>The re-use of leather shavings and effluent sludge will divert +/- 840 – 2160 tons of waste from landfill.</p>
<b>WASTE GENERATING FACILITY OR FACILITIES</b>	BADER SA (Pty) Ltd
<b>PHYSICAL ADDRESS OF FACILITY OR FACILITIES</b>	Stand 232
	3 <sup>rd</sup> Street
	Ga-Rankuwa
<b>GPS CO-ORDINATES OF WASTE GENERATING FACILITY OR FACILITIES</b>	<p>4 Corners of Bader SA (waste generating site)</p> <p>1 25° 33' 38" Latitude; 27° 59' 37" Longitude</p> <p>2 25° 33' 32" Latitude; 27° 59' 38" Longitude</p> <p>3 25° 33' 40" Latitude; 27° 59' 39" Longitude</p> <p>4 25° 33' 35" Latitude; 27° 59' 43" Longitude</p>
<b>CONTACT PERSON</b>	
<b>NAME</b>	Marinda de Beer
<b>ADDRESS</b>	Stand 232, 3 <sup>rd</sup> street, Ga-Rankuwa

<b>EMAIL ADDRESS</b>	Marinda.debeer@bader-leather.com		
<b>TELEPHONE</b>	012 797 7243		
<b>* DETAILED DESCRIPTION OF WASTE GENERATING PROCESS</b>	<p><u>Leather shaving waste generation:</u> Leather is shaved, buffed, split and trimmed to meet customer size and quality requirements.</p> <p><u>Effluent sludge waste generation:</u> Re-tanning and finishing of leather produce waste water that is treated to within the local by-law limits for discharge into the municipal sewer which generate effluent sludge that needs to be disposed.</p>		
<b>PRODUCTION PROCESS FLOW CHART ATTACHED</b>	<table border="1"> <tr> <td><u>YES</u></td> <td><b>NO</b></td> </tr> </table>	<u>YES</u>	<b>NO</b>
<u>YES</u>	<b>NO</b>		
<b>WASTE CLASSIFICATION</b>	<table border="1"> <tr> <td><b>HAZARDOUS</b></td> <td><u>GENERAL</u></td> </tr> </table>	<b>HAZARDOUS</b>	<u>GENERAL</u>
<b>HAZARDOUS</b>	<u>GENERAL</u>		
<b>IF WASTE IS HAZARDOUS LIST THE HAZARDS OF THE WASTE</b>	Non- Hazardous as per SANS 10234 classification results		
<b>*A process flow chart must be attached to the process description</b>			

### RISK ASSESSEMENT WITHOUT MITIGATION

Activity	Risk Description	Environmental Receptors	Assessment of Risk					Significance	
			Impact	Probability	Magnitude	Duration	Scale		
Transport of leather shavings and effluent sludge	Leather shavings could blow off truck during transport	Contaminate rain water runoff from roads in the event of spillage	Pollution of public roads and rain runoff	2	1	2	1	3	12
Delivery of leather shavings and effluent sludge	Leather shavings blown when tipping the load into the ash bin at cement brick manufacturer	Contaminate Soil	Pollution of soil	1	1	2	1	1	4
Storage of leather shavings and effluent sludge at cement brick manufacturer	Leachate of leather shavings and effluent sludge when stored in ash bin during rainy weather	Soil, rain water runoff and potential ground water pollution	Pollution of soil, rain water runoff and ground water	2	1	4	1	1	12
Brick manufacturing	Integrity and quality of cement bricks manufactured containing leather shavings and effluent sludge	Resource depletion ( landfill) Safety concern	Resource depletion (landfill) due to waste generation Safety of consumers	0	1	2	1	0	0

Brick manufacturing process including curing process	Mixing and blending of raw ingredients	Possible generation dust	Dust emissions	1	2	1	1	4
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The following factors and criteria must be used to assess the impacts of the activities:

Criteria	
MAGNITUDE (Severity)	DURATION
10 - Very high	5 - Permanent (longer than 10 years)
8 - High	4 - Long-term (5 to 10 years)
6 - Moderate	3 - Medium-term (12 months to 5 years)
4 - Low	2 - Short-term (0 to 12 months)
2 - Minor	1 - Immediate
SCALE	PROBABILITY (Likelihood)
5 - International	5 - Definite
4 - National	4 - Highly probable
3 - Regional	3 - Medium probability
2 - Local	2 - Low probability
1 - Site only	1 - Improbable
0 - None	0 - None

#### Magnitude

Magnitude measures the size of the impact

#### Duration

Duration refers to the lifetime of the impact i.e. how long it will last

#### Scale

The scale refers to the extent of the impact.

#### Probability

The probability refers to the chance of impact to occur. The potential impact could be most likely to occur, unlikely, etc.

#### Assessment of Significance of Impact

Significance rating of the potential impacts illustrates the importance of the impact itself. The size of area affected by pollution may be extremely high but the significance of this effect is dependent on the concentration or level of pollution in that area. In order to determine the significance of impact, the following method was used:

Significance Points (SP) = (Magnitude + Duration + Scale) x Probability

The values of SP are then ranged as follows:

Rating		Description
SP >60	Indicates high environmental significance	An impact which could influence the decision about whether or not to proceed with the activities regardless of any possible mitigation.
SP 30 – 60	Indicates moderate environmental significance	An impact or benefit which is sufficiently important to require management and which could have an influence on the decision unless it is mitigated.
SP <30	Indicates low environmental significance	Impacts with little real effect and which will not have an influence on or require modification of the activities.
+	Positive impact	An impact that is likely to result in positive consequences/effects

I, Narinda de Beer hereby declare that I have read the completed the Risk Assessment form and hereby confirm that the information is to the best of my knowledge true and correct.

Furthermore, I declare that I am fully aware of my responsibilities in terms of the Waste Exclusion Regulations, and that failure to comply with these Regulations may constitute an offence in terms of the National Environmental Management: Waste Act, 2008 (Act 59 of 2008).

Applicant (Full names) Narinda de Beer - BADER SA.

Designation SHEQ Manager

Signature N de Beer

Date 07/06/19 Place GIA-Rakwana

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Date Received			
Decision Taken	Authorised		Not Authorised (provide reasons)
Reference Number			